

IN THE CLAIMS

Please amend the claims as follows. This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A method for sending an authentication key to a calling party, the method comprising:

~~with a telephone network,~~ routing a call with a telephone network from a calling party to a server, the calling party initiating the call from a calling line identified by a calling line identifier;

~~with the telephone network,~~ determining with the telephone network an authentication key associated with the calling line identifier;

sending the authentication key to the server; and

sending the authentication key from the server to the calling party.

2. (Currently Amended) The method invention of claim 1, wherein the call is routed using a service switching point.

3. (Currently Amended) The method invention of claim 1, wherein a service control point determines the authentication key associated with the calling line identifier.

4. (Currently Amended) The method invention of claim 1, wherein the server comprises a connectivity server, and wherein the authentication key is sent to the connectivity server through a key distribution server.

5. (Currently Amended) The method invention of claim 4, wherein the authentication key is sent to the key distribution server through a firewall.

6. (Currently Amended) The method invention of claim 1, wherein the calling line identifier comprises a directory number.

7. (Original) A method for sending an authentication key to a calling party, the method comprising:

routing a call from a calling party to a connectivity server through a service switching point, the calling party initiating the call from a calling line identified by a calling line identifier;

sending a query from the service switching point to a service control point, the query comprising the calling line identifier; with the service control point,

determining an authentication key associated with the calling line identifier;

sending the authentication key to a key distribution server;

sending the authentication key from the key distribution server to the connectivity server; and

sending the authentication key from the connectivity server to the calling party.

8. (Currently Amended) The method ~~invention~~ of claim 7 further comprising:

removing the authentication key from key distribution server.

9. (Currently Amended) The method ~~invention~~ of claim 7, wherein the authentication key is sent to the key distribution server through a firewall.

10. (Currently Amended) The method ~~invention~~ of claim 7, wherein the connectivity server is in communication with the service switching point via a modem.

11. (Currently Amended) The method ~~invention~~ of claim 7, wherein the service control point retrieves the authentication key from a database correlating authentication keys and calling line identifiers.

12. (Currently Amended) The method ~~invention~~ of claim 7, wherein the calling line identifier comprises a directory number.

13. (Currently Amended) The method invention of claim 7, wherein the query is sent from the service switching point to the service control point in response to a terminating attempt trigger.

14. (Original) A system for sending an authentication key to a calling party, the system comprising:

a server;

a service switching point operative to route a call from a calling party to the server, the calling party initiating the call from a calling line identified by a calling line identifier;

a database correlating authentication keys and calling line identifiers; and

a service control point in communication with the database and operative to determine an authentication key associated with the calling line identifier in response to a query from the service switching point, wherein the service control point is further operative to send the authentication key associated with the calling line identifier to the server;

wherein the server is further operative to send the authentication key to the calling party.

15. (Currently Amended) The system invention of claim 14, wherein the server is part of a computer network comprising a second server, and wherein the authentication key is sent to the first-mentioned server via the second server.

16. (Currently Amended) The system invention of claim 15, wherein the first-mentioned server comprises a connectivity server, and wherein the second server comprises a key distribution server.

17. (Currently Amended) The system invention of claim 14 further comprising a firewall, wherein the authentication key is sent to the server through the firewall.

18. (Currently Amended) The system ~~invention~~ of claim 14, wherein the calling line identifier comprises a directory number.
19. (Currently Amended) The system ~~invention~~ of claim 14, wherein the service switching point is operative to send the query to the service control point in response to a terminating attempt trigger.
20. (Currently Amended) The system ~~invention~~ of claim 14 further comprising a modem connecting the server with the service switching point.
21. (Currently Amended) The method ~~invention~~ of claim 7 further comprising:
marking the authentication key as distributed.
22. (Currently Amended) A method for sending an authentication key to a calling party, the method comprising:
routing a call from a calling party to a connectivity server through a service switching point, the calling party initiating the call from a calling line identified by a calling line identifier;
sending a query from the service switching point to a service control point, the query comprising the calling line identifier;
~~with the service control point,~~ determining with the service control point whether an authentication key for the calling line identifier exists in a key distribution server;
if the authentication key for the calling line identifier exists, sending an indication to the key distribution server that the authentication key stored in the key distribution server should be sent to the calling party;
sending the authentication key from the key distribution server to the connectivity server; and

sending the authentication key from the connectivity server to the calling party.

23. (Currently Amended) The method ~~invention~~ of claim 22 further comprising:
removing the authentication key from key distribution server.
24. (Currently Amended) The method ~~invention~~ of claim 22 further comprising:
marking the authentication key as distributed.
25. (Currently Amended) The method ~~invention~~ of claim 22, wherein the indication is sent to the key distribution server through a firewall.
26. (Currently Amended) The method ~~invention~~ of claim 22, wherein the connectivity server is in communication with the service switching point via a modem.
27. (Currently Amended) The method ~~invention~~ of claim 22, wherein the service control point determines whether an authentication key exists for the calling line identifier by consulting a database storing calling line identifiers for which authentication keys exist.
28. (Currently Amended) The method ~~invention~~ of claim 22, wherein the calling line identifier comprises a directory number.
29. (Currently Amended) The method ~~invention~~ of claim 22, wherein the query is sent from the service switching point to the service control point in response to a terminating attempt trigger.

30. (Currently Amended) A method for sending an authentication key to a calling party, the method comprising:

~~with a telephone network,~~ routing a call with a telephone network from a calling party to a server, the calling party initiating the call from a calling line identified by a calling line identifier;

~~with the telephone network,~~ providing, with the telephone network, the server with the calling line identifier;

~~with the server,~~ authenticating, with the server, the calling party with the calling line identifier; and

sending an authentication key from the server to the calling party.

31. (Currently Amended) The method invention of claim 30, wherein the calling line identifier comprises a directory number.

32. (Currently Amended) The method invention of claim 30, wherein the server comprises a connectivity server, and the invention further comprises: before the authentication key is sent from the connectivity server to the calling party, sending the authentication key to the connectivity server from a key distribution server.